

DECLARATION FOR PATENT APPLICATION

As a below named inventor, I declare that I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

Interleukin-1 β Converting Enzyme Like Apoptosis Protease 3 and 4

the specification of which was filed on **June 5, 1995**. Application Serial No: **08/462,969**

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 C.F.R. § 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT international application, which designated at least one country other than the United States listed below, and have also identified below any foreign application for patent or inventor's certificate, or PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s):

Priority Claimed
Yes No

(Number) (Country) (Day/Month/Year Filed)

I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below.

(Application Serial No.) (Filing Date)

I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s), or under § 365(b) of any PCT international application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose information that is material to patentability as defined in 37 C.F.R. § 1.56 that became available between the filing date of the prior application and the national or PCT international filing date of this application.

08/334,251 **Nov-01-94** **Pending**
(Application Serial No.) (Filing Date) (Status: patented, pending, abandoned)

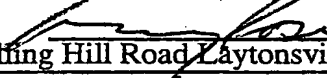
I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith: A. Anders Brookes (Reg. No. 36,373), James H. Davis (Reg. No. 40,582), Kenley Hoover (Reg. No. 40,302), Michele M. Wales (Reg. No. 43,975), and Joseph J. Kenny (Reg. No. 43,710), of Human Genome Sciences, Inc. 9410 Key West Avenue, Rockville, Maryland, 20878.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of first joint inventor: Wei-Wu He

Inventor's signature: _____ Date: _____
Residence: 6225 Free Stone Court Columbia, MD 21045 Citizenship: CN
Post Office Address: same as above

Full name of first joint inventor: Craig A. Rosen

Inventor's signature:  Date: 4/14/91
Residence: 22400 Rolling Hill Road Laytonsville, MD 20882 Citizenship: US
Post Office Address: same as above

Full name of additional joint inventor: Peter L. Hudson

Inventor's signature: _____ Date: _____
Residence: 19307 Penrod Terrace Germantown, MD 20874 Citizenship: US
Post Office Address: same as above

Full name of additional joint inventor: Gregg A. Hastings

Inventor's signature: _____ Date: _____
Residence: 31919 Richgrove Court Westlake Village, CA 91321 Citizenship: US
Post Office Address: same as above

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: application of: He et al.

Serial No.: 08/462,969

Group Art Unit: 1652

Filed: June 5, 1995

Examiner: G. Bugaisky

For: Interleukin-1 β Converting Enzyme
Like Apoptosis Protease 3 and 4

Attorney Docket No.: PF140P1

Declaration of Craig Rosen Under 37 CFR §1.132

Assistant Commissioner For Patents
Washington, D.C. 20231

Sir:

1. I, Craig Rosen, Ph.D., hereby declare and state as follows:

2. I am named as an inventor on the captioned U.S. Patent Application. I am employed by Human Genome Sciences, Inc. (HGS) as Senior Vice President, Research and Development. The work described below was done by myself, under my supervision, or as part of a collaborative research effort with other individuals at Human Genome Sciences, Inc. (HGS) and with individuals working at the University of Michigan.

3. We identified a cDNA clone encoding Interleukin-1 Beta Converting Enzyme Like Apoptosis Protease-3 (ICE-LAP3) by screening the proprietary HGS database of partial-length (EST) sequences for similarity to members of the ICE/Ced-3 polypeptide family. We retrieved the cDNA clone corresponding to the partial-length sequence from HGS' catalogued library of cDNA clones. The clone retrieved had the designation HE2CA82 and was deposited with the American Type Culture Collection as ATCC accession no. 75875 on August 25, 1994 (a copy of the ATCC contract for accession no. 75875 is attached as Exhibit A). We determined the complete nucleotide sequence for the HE2CA82 clone, using sequencing methods which were routine in the art and publicly available as of November 1, 1994; i.e., as of the filing date of parent application U.S. Serial No. 08/334,251, to which the captioned application claims priority.

4. The nucleotide sequence data filed in the captioned U.S. Patent Application and the nucleotide sequence data published in Duan et al., J. Biol. Chem. 271:1621 (1996) (Exhibit B), which differ slightly, were both obtained from cDNA clone HE2CA82. The "original" sequence data was disclosed in the captioned application and in parent application U.S. Serial No. 08/334,251. The "corrected" sequence data published in Duan et al. was also published in GenBank as accession no. U39613 (Exhibit C).

5. The differences in the original nucleotide sequence data and the corrected nucleotide sequence data are shown in the sequence alignment attached hereto as Exhibit D (the original sequence data is denoted "PF140" and the corrected sequence data is denoted "Duan"). As can be seen from Exhibit D, the original nucleotide sequence data differs from the corrected sequence data at four (4) nucleotide positions. The differences in the originally deduced amino acid sequence and the amino acid sequence deduced from the corrected nucleotide sequence data is shown in the alignment attached hereto as Exhibit E.

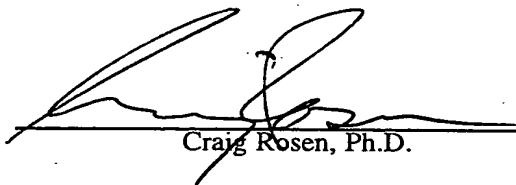
6. The accuracy of the original sequencing data represented by the sequences shown in Figure 1 of the present application is greater than 99%. I am of the opinion that 99% accuracy is well within the state of the art of DNA sequencing at the time parent application U.S. Serial No. 08/334,251 was filed (i.e., November 1, 1994). Further, I am of the opinion that the corrected ICE-LAP3 nucleotide and amino acid sequences would have been apparent to one skilled in the art in possession of the corresponding human cDNA clone contained in ATCC Deposit No. 75875 (referenced in the captioned patent application and in parent application U.S. Serial No. 08/334,251) and the sequence data presented in U.S. Serial No. 08/334,251. I believe this to be true because the correct ICE-LAP3 coding sequence can be readily determined from the deposited clone using methods of DNA sequencing which were routine in the art as of November 1, 1994.

7. I believe that the actual coding portion of the nucleotide sequence of the human cDNA clone contained in ATCC Deposit No. 75875 is the same as the nucleotide sequence published as GenBank Accession No. U39613 in connection with the Duan et al. publication.

8. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under § 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patents issued thereupon.

3/14/99

Date



Craig Rosen, Ph.D.

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the specification of which was filed on **June 5, 1995**. Application Serial No: **08/462,969**

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08/334,251 **Nov-01-94** **Pending**
(Application Serial No.) (Filing Date) (Status: patented, pending, abandoned)

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Post Office Address: same as above

Full name of additional joint inventor: Gregg A. Hastings

Inventor's signature:  Date: 4/19/99
Residence: 31919 Richgrove Court Westlake Village, CA 91321 Citizenship: US
Post Office Address: same as above

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: He, et al.

Application No.: Not yet assigned

Art Unit: Not yet assigned

Filed: Concurrently herewith

Examiner: Not yet assigned

For: Interleukin-1 β Converting Enzyme
Like Apoptosis Protease-3 and 4

Attorney Docket No.: PF140P1D1

POWER OF ATTORNEY BY ASSIGNEE OF ENTIRE INTEREST
Revocation of Prior Power of Attorney

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

Human Genome Sciences, Inc., organized and existing under the laws of the State of Delaware, having its principal place of business at 9410 Key West Avenue, Rockville, Maryland 20850, is assignee of record of the entire right, title and interest for the above-identified application by virtue of an assignment filed in the parent application U.S. Application Serial No. 08/462,969, filed June 5, 1995, and recorded on April 22, 1996 in the U.S. Patent and Trademark Office at Reel 7937, Frame 0822.

The undersigned has reviewed all the documents in the chain of title of the patent application identified above and, to the best of undersigned's knowledge and belief, title is in the assignee identified above.

The assignee hereby revokes all powers of attorney heretofore given in the above-captioned application and appoints as its attorneys or agents James H. Davis, (Registration No. 40,582); Kenley K. Hoover, (Registration No. 40,302); Joseph Kenny (Registration No. 43,710); Jonathan L. Klein (Registration No. 41,119); and Michele Wales (Registration No. 43,975) with full power of substitution, association, and revocation, to prosecute said application and to transact all business in the United States Patent and Trademark Office connected therewith.

Please retain the correspondence address for this application as:

Human Genome Sciences, Inc.
9410 Key West Avenue
Rockville, Maryland 20850
Tel: 301-309-8504 Fax: 301-309-8439

0951600 "004000

THE **NEW** **YORK** **PUBLIC** **LIBRARY**

On behalf of Human Genome Sciences, Inc.

Signature: Q-HD-

Title: Senior Vice President and General Counsel

Date: July 10, 2000

Serial No 08/462,969

Ref No: PF140P1

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Page 2 of 2

Human Genome Sciences, Inc.
9410 Key West Avenue
Rockville, MD 20859

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Serial No 08/462,969

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